

Figure 30

VL	Position	Framework 1															
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
		EcoRV															
		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
VLK1 (SEQ ID NO: 54)		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
MSPPro28 (SEQ ID NO: 55)		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
VLK3 (SEQ ID NO: 56)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro24 (SEQ ID NO: 57)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro29 (SEQ ID NO: 58)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
VLK4 (SEQ ID NO: 59)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro21 (SEQ ID NO: 60)		GAT	ATC	GTG	ATG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
VL12 (SEQ ID NO: 61)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro55 (SEQ ID NO: 62)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro11 (SEQ ID NO: 63)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro26 (SEQ ID NO: 64)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
VL13 (SEQ ID NO: 65)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro54 (SEQ ID NO: 66)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro2 (SEQ ID NO: 67)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro12 (SEQ ID NO: 68)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro59 (SEQ ID NO: 69)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
		BanII															
		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
VLK1 (SEQ ID NO: 54)		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
MSPPro28 (SEQ ID NO: 55)		GAT	ATC	CAG	ATG	ACC	CAG	AGC	CCG	TCT	AGC	CTG	AGC	GCG	AGC	GTG	GGT
VLK3 (SEQ ID NO: 56)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro24 (SEQ ID NO: 57)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro29 (SEQ ID NO: 58)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
VLK4 (SEQ ID NO: 59)		GAT	ATC	GTG	CTG	ACC	CAG	AGC	CCG	GCG	ACC	CTG	AGC	CTG	TCT	CCG	GGC
MSPPro21 (SEQ ID NO: 60)		GAT	ATC	GTG	ATG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
VL12 (SEQ ID NO: 61)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro55 (SEQ ID NO: 62)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro11 (SEQ ID NO: 63)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro26 (SEQ ID NO: 64)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
VL13 (SEQ ID NO: 65)		GAT	ATC	GCA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro54 (SEQ ID NO: 66)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro2 (SEQ ID NO: 67)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro12 (SEQ ID NO: 68)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
MSPPro59 (SEQ ID NO: 69)		GAT	ATC	GAA	CTG	ACC	CAG	AGC	CCG	GAT	AGC	CTG	GCG	GTG	AGC	CTG	GGC
		MfeI															
		GAA/CAG	GTG	CAA	TTG	GTT	CAG	TCT	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
VH1A (SEQ ID NO: 70)		GAA/CAG	GTG	CAA	TTG	GTT	CAG	TCT	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro21 (SEQ ID NO: 71)		CAG	GTG	CAA	TTG	GTT	CAG	TCT	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro24 (SEQ ID NO: 72)		CAG	GTG	CAA	TTG	GTT	CAG	TCT	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro28 (SEQ ID NO: 73)		CAG	GTG	CAA	TTG	GTT	CAG	TCT	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
VH1B (SEQ ID NO: 74)		GAA/CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro54 (SEQ ID NO: 75)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro55 (SEQ ID NO: 76)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro2 (SEQ ID NO: 77)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro11 (SEQ ID NO: 78)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro26 (SEQ ID NO: 79)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
MSPPro29 (SEQ ID NO: 80)		CAG	GTG	CAA	TTG	GTT	CAG	AGC	GGC	GCG	GAA	GTG	AAA	AAA	CCG	GGC	AGC
VH2 (SEQ ID NO: 81)		GAA/CAG	GTG	CAA	TTG	AAA	GAA	AGC	GGC	CCG	GCC	CTG	GTG	AAA	CCG	AGC	CAA
MSPPro12 (SEQ ID NO: 82)		CAG	GTG	CAA	TTG	AAA	GAA	AGC	GGC	CCG	GCC	CTG	GTG	AAA	CCG	AGC	CAA
VH3 (SEQ ID NO: 83)		GAA/CAG	GTG	CAA	TTG	AAA	GAA	AGC	GGC	CCG	GCC	CTG	GTG	AAA	CCG	AGC	CAA
MSPPro59 (SEQ ID NO: 84)		CAG	GTG	CAA	TTG	AAA	GAA	AGC	GGC	CCG	GCC	CTG	GTG	AAA	CCG	AGC	CAA



**Figure 30 cont.**

CDR 1										CDR 2																			
3										4																			
PstI										SexAI																			
3	4	5	6	7	8	9	0	a	b	c	d	e	f	1	2	3	4	5	6										
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	---	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	AAA	GCA	CCG	AAA	CTA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	---	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	AAA	GCA	CCG	AAA	CTA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	AGC	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	CAA	GCA	CCG	CGT	CFA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	AGC	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	CAA	GCA	CCG	CGT	CFA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	---	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	CAA	GCA	CCG	CGT	CFA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	AGC	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	CAG	CCG	CCG	AAA	CTA	
TGC	AGA	GCG	AGC	CAG	GGC	ATT	AGC	AGC	---	---	---	---	AGC	TAT	CTG	GCG	TGG	TAC	CAG	CAG	AAA	CCA	GGT	CAG	CCG	CCG	AAA	CTA	
TGT	ACG	GGT	ACT	AGC	AGC	GAT	GTG	GGC	GGC	GGC	TAT	AAC	---	---	TAT	GTG	AGC	TGG	TAC	CAG	CAG	CAT	CCC	GGG	AAG	GCG	CTG	AAA	CTG
TGT	ACG	GGT	ACT	AGC	AGC	GAT	GTG	GGC	GGC	GGC	TAT	AAC	---	---	TAT	GTG	AGC	TGG	TAC	CAG	CAG	CAT	CCC	GGG	AAG	GCG	CTG	AAA	CTG
TGT	ACG	GGT	ACT	AGC	AGC	GAT	GTG	GGC	GGC	GGC	TAT	AAC	---	---	TAT	GTG	AGC	TGG	TAC	CAG	CAG	CAT	CCC	GGG	AAG	GCG	CTG	AAA	CTG
TGT	ACG	GGT	ACT	AGC	AGC	GAT	GTG	GGC	GGC	GAT	AAA	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG
TGT	ACG	GGC	---	GAT	GCG	---	CTG	GGC	GAT	AAA	---	---	---	---	TAC	GCG	AGC	TGG	TAC	CAG	CAG	AAA	CCC	GGG	CAG	GCG	CTA	GTT	CTG

CDR 1										CDR 2																	
3										4																	
BspEI										XhoI																	
3	4	5	6	7	8	9	0	1	a	b	2	3	4	5	6	7	8	9	0								
AAA	GCC	TCC	GGA	GGC	ACT	TTT	AGC	AGC	-	-	TAT	GCG	ATT	AGC	TGG	GTG	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	GGC
AAA	GCC	TCC	GGA	GGC	ACT	TTT	AGC	AGC	-	-	TAT	GCG	ATT	AGC	TGG	GTG	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	GGC
AAA	GCC	TCC	GGA	GGC	ACT	TTT	AGC	AGC	-	-	TAT	GCG	ATT	AGC	TGG	GTG	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	GGC
AAA	GCC	TCC	GGA	GGC	ACT	TTT	AGC	AGC	-	-	TAT	GCG	ATT	AGC	TGG	GTG	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	GGC
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
AAA	GCC	TCC	GGA	TAT	ACC	TTT	ACC	AGC	-	-	TAT	TAT	ATG	CAC	TGG	GTC	GCG	CCT	GCG	CAG	GGT	CTC	GAG	TGG	ATG	GGC	TGG
ACC	TTT	TCC	GGA	TTT	AGC	CTG	TCC	ACG	TCT	GGC	GTT	GGC	GTG	GGC	TGG	ATT	GCG	CCT	GCG	AAA	GCC	CTC	GAG	TGG	CTG	GCT	CTG
ACC	TTT	TCC	GGA	TTT	AGC	CTG	TCC	ACG	TCT	GGC	GTT	GGC	GTG	GGC	TGG	ATT	GCG	CCT	GCG	AAA	GCC	CTC	GAG	TGG	CTG	GCT	CTG
GCG	ATT	TCC	GGA	GAT	AGC	GTG	AGC	AGC	AAC	AGC	GCG	GCG	TGG	AAC	TGG	ATT	GCG	CAG	TCT	CCT	GGC	CTC	GAG	TGG	CTG	GGC	CGT
GCG	ATT	TCC	GGA	GAT	AGC	GTG	AGC	AGC	AAC	AGC	GCG	GCG	TGG	AAC	TGG	ATT	GCG	CAG	TCT	CCT	GGC	CTC	GAG	TGG	CTG	GGC	CGT

Figure 30 cont.

CDR 2															Framework 3																
7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7											
AseI															BamHI																
TTA	ATT	TAT	GCA	GCC	AGC	AGC	TTG	CAA	AGC	GGG	GTC	CTG	TCC	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACT	GAT	TTT	ACC	CTG	ACC	ATT	AGC		
TTA	ATT	TAT	GCA	GCC	AGC	AGC	TTG	CAA	AGC	GGG	GTC	CTG	TCC	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACT	GAT	TTT	ACC	CTG	ACC	ATT	AGC		
TTA	ATT	TAT	GCG	GCG	AGC	AGC	CGT	GCA	ACT	GGG	GTC	CTG	CGG	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACG	GAT	TTT	ACC	CTG	ACC	ATT	AGC		
TTA	ATT	TAT	GCG	GCG	AGC	AGC	CGT	GCA	ACT	GGG	GTC	CTG	CGG	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACG	GAT	TTT	ACC	CTG	ACC	ATT	AGC		
TTA	ATT	TAT	TGG	GCA	TCC	ACC	CGT	GAA	AGC	GGG	GTC	CTG	CGG	GAT	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACT	GAT	TTT	ACC	CTG	ACC	ATT	TCG	
TTA	ATT	TAT	TGG	GCA	TCC	ACC	CGT	GAA	AGC	GGG	GTC	CTG	CGG	GAT	CGT	TTT	AGC	GGC	TCT	GGA	TCC	GGC	ACT	GAT	TTT	ACC	CTG	ACC	ATT	TCG	
ATG	ATT	TAT	GAT	GTG	AGC	AAC	CGT	CCC	TCA	GGC	GTG	AGC	AAC	CGT	TTT	AGC	GGG	TCC	AAA	AGC	GGC	AAC	ACC	GCG	AGC	CTG	ACC	ATT	AGC		
ATG	ATT	TAT	GAT	GTG	AGC	AAC	CGT	CCC	TCA	GGC	GTG	AGC	AAC	CGT	TTT	AGC	GGG	TCC	AAA	AGC	GGC	AAC	ACC	GCG	AGC	CTG	ACC	ATT	AGC		
ATG	ATT	TAT	GAT	GTG	AGC	AAC	CGT	CCC	TCA	GGC	GTG	AGC	AAC	CGT	TTT	AGC	GGG	TCC	AAA	AGC	GGC	AAC	ACC	GCG	AGC	CTG	ACC	ATT	AGC		
ATG	ATT	TAT	GAT	GTG	AGC	AAC	CGT	CCC	TCA	GGC	GTG	AGC	AAC	CGT	TTT	AGC	GGG	TCC	AAA	AGC	GGC	AAC	ACC	GCG	AGC	CTG	ACC	ATT	AGC		
GTG	ATT	TAT	GAT	GAT	TCT	GAC	CGT	CCC	TCA	GGC	ATC	CCG	GAA	CGC	TTT	AGC	GGG	TCC	AAC	AGC	GGC	AAC	ACC	GCG	ACC	CTG	ACC	ATT	AGC		
GTG	ATT	TAT	GAT	GAT	TCT	GAC	CGT	CCC	TCA	GGC	ATC	CCG	GAA	CGC	TTT	AGC	GGG	TCC	AAC	AGC	GGC	AAC	ACC	GCG	ACC	CTG	ACC	ATT	AGC		
GTG	ATT	TAT	GAT	GAT	TCT	GAC	CGT	CCC	TCA	GGC	ATC	CCG	GAA	CGC	TTT	AGC	GGG	TCC	AAC	AGC	GGC	AAC	ACC	GCG	ACC	CTG	ACC	ATT	AGC		
GTG	ATT	TAT	GAT	GAT	TCT	GAC	CGT	CCC	TCA	GGC	ATC	CCG	GAA	CGC	TTT	AGC	GGG	TCC	AAC	AGC	GGC	AAC	ACC	GCG	ACC	CTG	ACC	ATT	AGC		
CDR 2															BstEII																
1	2	a	b	c	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7		
ATT	ATT	CCG	-	-	ATT	TTT	GGC	ACG	GCG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ACC	GCG	GAT	GAA	AGC	ACC	AGC	ACC	
ATT	ATT	CCG	-	-	ATT	TTT	GGC	ACG	GCG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ACC	GCG	GAT	GAA	AGC	ACC	AGC	ACC	
ATT	ATT	CCG	-	-	ATT	TTT	GGC	ACG	GCG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ACC	GCG	GAT	GAA	AGC	ACC	AGC	ACC	
ATT	ATT	CCG	-	-	ATT	TTT	GGC	ACG	GCG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ACC	GCG	GAT	GAA	AGC	ACC	AGC	ACC	
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	AAC	CCG	-	-	AAT	AGC	GGC	GGC	ACG	AAC	TAC	GCG	CAG	AAG	AAG	TTT	CAG	GGC	CGG	GTG	ACC	ATT	ATG	ACC	CGT	GAT	ACC	AGC	ATT	AGC	ACC
ATT	GAT	-	-	-	TGG	GAT	GAT	GAT	AAG	TAT	TAT	AGC	ACC	AGC	CTG	AAA	ACG	CGT	CTG	ACC	ATT	AGC	AAA	GAT	ACT	TCG	AAA	AAT	CAG		
ATT	GAT	-	-	-	TGG	GAT	GAT	GAT	AAG	TAT	TAT	AGC	ACC	AGC	CTG	AAA	ACG	CGT	CTG	ACC	ATT	AGC	AAA	GAT	ACT	TCG	AAA	AAT	CAG		
ACC	TAT	TAT	CGT	-	AGC	AAA	TGG	TAT	AAC	GAT	TAT	GCG	GTG	AGC	GTG	AAA	AGC	CGG	ATT	ACC	ATC	AAC	CCG	GAT	ACT	TCG	AAA	AAC	CAG		
ACC	TAT	TAT	CGT	-	AGC	AAA	TGG	TAT	AAC	GAT	TAT	GCG	GTG	AGC	GTG	AAA	AGC	CGG	ATT	ACC	ATC	AAC	CCG	GAT	ACT	TCG	AAA	AAC	CAG		

## Replacement Sheet

Figure 30 cont.

[illegible]

Figure 30 cont.

5	6	7	8	9
BsiWI				
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
GAA ATT AAA	CGT ACG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			
ACC GTT CTT	GGC CAG			

Framework 4

e	f	g	h	i	j	k	l	1	2	3	4	5	6	7	8	9	0	1	2	3
11																				
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA
GAT AAT TGG	TTT AAG	CCT TTT	TCT TTT	TCT TTT	TCT TTT	TCT TTT	TCT TTT	GAT GAT	GAT GAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
GTT AAT CAT	TGG ACT	TAT ACT	TTT ACT	TTT ACT	TTT ACT	TTT ACT	TTT ACT	GAT TAT	GAT TAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
TCT CAT GGT	TAT TAT	TAT TAT	CTT TTT	CTT TTT	CTT TTT	CTT TTT	CTT TTT	GAT CTT	GAT CTT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA
CAG TAT GTT	AAT ATG	CCT CAT	TTT CAT	TTT CAT	TTT CAT	TTT CAT	TTT CAT	GAT TAT	GAT TAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
TGG TAT CTT	CGT CGT	GTT GTT	CTT CTT	CTT CTT	CTT CTT	CTT CTT	CTT CTT	GAT CAT	GAT CAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
(x)	GAT TTT	CTT CTT	GAT TAT	GAT TAT	GAT TAT	GAT TAT	GAT TAT	GAT TAT	GAT TAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
CAT TAT GTT	TTT TTT	GGT GGT	TTT TTT	TTT TTT	TTT TTT	TTT TTT	TTT TTT	GAT TAT	GAT TAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
ACT TAT AAT	AAT TAT	GGT TAT	TAT TAT	TAT TAT	TAT TAT	TAT TAT	TAT TAT	GAT AAT	GAT AAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
TAT CTT GAT	GGT TAT	TAT TAT	TAT TAT	TAT TAT	TAT TAT	TAT TAT	TAT TAT	GAT AAT	GAT AAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA
GGT TCT ACT	GTT GGT	TAT ATG	TTT TTT	TTT TTT	TTT TTT	TTT TTT	TTT TTT	GAT TAT	GAT TAT	TGG TGG	GSC GSC	CAA CAA	GGC GGC	ACC ACC	CTG CTG	GTG GTG	ACG ACG	GTT GTT	AGC AGC	TCA TCA
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA
(x)	(x)	(x)	(x)	x	x	x	x	GAT	x	TGG	GSC	CAA	GGC	ACC	CTG	GTG	ACG	GTT	AGC	TCA